



**FÖRSVARETS FORSKNINGSANSTALT**

Avdelning 1

Date 20.6.68

No.

Research Institute of National Defence

Address SUNDBYBERG 4, Sweden

Telegrams Foaeft, Stockholm

➤ Professor Joshua Lederberg  
Department of Genetics  
Stanford University School of  
Medicine

Palo Alto, California

U.S.A.

Dear Professor Lederberg,

Working in collaboration with professor Torbjörn Caspersson at Karolinska Institutet in Stockholm I am investigating with my group the possibilities to find methods or systems for rapid detection of microorganisms present in the air. This is referred to in an accompanying letter from professor Caspersson.

We feel that our work should profit substantially if we were able to follow some of the efforts made to detect extraterrestrial life to which field our research object seems to be closely related. Regarding your contributions both in discussing relevant criterion systems of exobiology and in designating the parameters for the "Multivators" I find it natural to turn to you to ask for your kind help to introduce me to the pertinent research done in the field of detecting extraterrestrial life.

My first hand interests concern the following topics:

1. Optimisation of the number of mutually unrelated methods of analysis necessary to establish - to a chosen degree - the presence of extraterrestrial life, or in our case the presence of microorganisms in a sample.
2. The stage of development of the Multivator.
3. The present stage of the method proposed by Levinthal, Hundley and you 1963 for the Mark III Multivator to amplify by means of fluorescent metabolic products and a flying spot scanning system the possibilities to detect a growing bacterial colony on the surface of a substrate gel.
4. The possible use of gaschromatography and spectrometry for classification of bacteria.

I will be visiting San Fransisco and Los Angeles during the middle of September this year and would be pleased if a meeting could be arranged on September 13 or some other day that would suite you and your collaborators.

◦ I am looking forward to meet you and am

Sincerely yours

Johan Lundin  
Chief Biology Section

cc: Professor Torbjörn Caspersson